

## Claims

- [c1] A method of pattern transfer in the fabrication of ICs, comprising:  
 providing a substrate;  
 coating the substrate with a photosensitive layer having compounds dissolved in a solvent;  
 evaporating the solvent from the photosensitive layer without using elevated temperatures;  
 selectively exposing the photosensitive layer; and  
 developing the photosensitive layer to selectively remove portions thereof, wherein evaporating the solvent without using elevated temperatures reduces roughness on sidewalls of the photosensitive layer after development.
- [c2] The method of claim 1 wherein the photosensitive layer comprises photoresist.
- [c3] The method of claim 2 further comprises the step of providing an antireflective coating on the substrate.
- [c4] The method of claim 3 wherein the step of coating the substrate with a photosensitive layer comprises spin-coating techniques.
- [c5] The method of claim 2 wherein the step of coating the substrate with a photosensitive layer comprises spin-coating techniques.
- [c6] The method of claim 1 wherein the step of coating the substrate with a photosensitive layer comprises spin-coating techniques.
- [c7] The method of claim 6 further comprises the step of providing an antireflective coating on the substrate.
- [c8] The method of claim 1 further comprises the step of providing an antireflective coating on the substrate.
- [c9] The method of claim 1 wherein the step of evaporating the solvent comprises evaporating the solvent in a vacuum environment.
- [c10] The method of claim 9 wherein the step of evaporating the solvent further comprises evaporating the solvent at about room temperature.

- [c11] The method of claim 9 wherein the step of evaporating the solvent further comprises evaporating the solvent at temperatures raised slightly above room temperature.
- [c12] The method of claim 9 wherein the vacuum environment comprises a pressure of about 1 Pa to less than  $1 \times 10^5$  Pa.
- [c13] The method of claim 12 wherein the step of evaporating the solvent further comprises evaporating the solvent at about room temperature.
- [c14] The method of claim 12 wherein the step of evaporating the solvent further comprises evaporating the solvent at temperatures raised slightly above room temperature.
- [c15] The method of claim 9 wherein the pressure is less than 10hPa.
- [c16] The method of claim 15 wherein the step of evaporating the solvent further comprises evaporating the solvent at about room temperature.
- [c17] The method of claim 15 wherein the step of evaporating the solvent further comprises evaporating the solvent at temperatures raised slightly above room temperature.
- [c18] The method of claim 1 wherein the step of evaporating the solvent further comprises evaporating the solvent at about room temperature.
- [c19] The method of claim 1 wherein the step of evaporating the solvent further comprises evaporating the solvent at temperatures raised slightly above room temperature.
- [c20] A method of pattern transfer in the fabrication of ICs, comprising:  
 providing a substrate;  
 coating the substrate with a photosensitive layer having compounds dissolved in a solvent;  
 evaporating the solvent from the photosensitive layer in a vacuum environment without using elevated temperatures;  
 selectively exposing the photosensitive layer; and

developing the photosensitive layer to selectively remove portions thereof, wherein evaporating the solvent without using elevated temperatures reduces roughness on sidewalls of the photosensitive layer after development.

[c21]

A method of pattern transfer in the fabrication of ICs, comprising:  
providing a substrate;  
coating the substrate with a photoresist layer having compounds dissolved in a solvent;  
evaporating the solvent from the photoresist layer in a vacuum environment without using elevated temperatures;  
selectively exposing the photoresist layer; and  
developing the photoresist layer to selectively remove portions thereof, wherein evaporating the solvent without using elevated temperatures reduces roughness on sidewalls of the photoresist layer after development.